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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,119	12/23/2004	Daniele Fregonese	102792-386(11050P4)	4877
27389 7590 10/07/2010 PARFOMAK, ANDREW N. NORRIS MCLAUGHLIN & MARCUS PA 875 THIRD AVE, 8TH FLOOR NEW YORK, NY 10022				
EXAMINER KHAN, AMINA S				
ART UNIT		PAPER NUMBER		
1764				
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10/07/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/519,119

**Applicant(s)**

FREGONESE ET AL.

**Examiner**

AMINA KHAN

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 8-14 and 16-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-14 and 16-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to applicant's amendments filed on July 30, 2010.
2. Claims 1-5,8-14 and 16-28 are pending. Claims 6,7 and 15 have been cancelled. Claims 1 and 2 have been amended.
3. Claims 1-5,8-14,16,19-23 and 25-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lykke et al. (US 6,242,405) for the reasons set forth below.
4. Claims 17,18 and 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lykke et al. (US 6,242,405) in view of Gutierrez et al. (US 5,739,093) for the reasons set forth below.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5,8-14,16,19-23 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lykke et al. (US 6,242,405).

Lykke et al. teach detergent compositions for laundering (column 20, lines 1-5) comprising enzyme encapsulated particles where the core encapsulation polymer may be water-soluble (column 7, lines 65-67) wherein the enzyme is non-released during storage and only released during release into wash water (column 5, lines 55-60). Lykke et al. further teach the detergents comprise amylases and proteases (column 6, lines 25-35) and that one or more enzymes may be encapsulated together or separately (column 16, lines 20-30). Lykke et al. further teach gel compositions (column 16, lines 45-50) and compositions comprising water soluble calcium salts in concentrations of 1-40% (column 19, lines 1-15; column 20, lines 40-45), hydroxycarboxylate builders specifically citrates (column 23, lines 40-45), polyacrylates (column 24, lines 5-15), which meets the limitation of density aid, 00.00001% to 2% protease and amylase (column 24, lines 45-50, column 25, lines 35-50), coloring agents (column 28, lines 10-15), up to 70% water, 0-30% organic solvent (column 16, lines 40-45) and starch (column 28, lines 25-30). Lykke et al. further teach particles of sizes smaller than 30 $\mu$ m which can swell up to 2 times the size (60 $\mu$ m) (column 7, lines 5-45). Lykke et al. further teach that the detergents, which may be gels, comprise builders (column 22, lines 52-67) such as homopolymers of polyacrylates (column 24, lines 4-10) wherein the detergent will permeate through the shell and that the enzymes may be encapsulated and blended into the gel detergent (column 16, lines 15-50)

Lykke et al. do not teach the migration speed of the particles, viscosity or density of the composition, salt content of at least 80% of the non-aqueous component, ratio of enzyme present in gel and the enzyme present in particles, the percentage of starch and the difference in density of the gel and the particles.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that the teachings of Lykke et al. would encompass the instantly claimed properties as Lykke et al. clearly teach gel concentrates comprising similar components at similar concentrations. The properties would be a direct function of the compositions of the gel and particles, and since similar components are combined in similar ratios, the consistency of the composition is expected to be similar to the instant composition.

It would have been further obvious to optimize the concentrations of the components of Lykke et al. to arrive at the instantly claimed percentages, ratios and properties because all of these parameters would be result effective variables influencing the cleaning properties of the laundering compositions. All these parameters would effect the overall penetration of the cleansing composition into the pores of the fibers and residence time on or in the fibers and the stability of the encapsulated particles as well as their controlled delivery. These parameters would therefore directly impact the overall cleansing ability. Optimization of the amount of salt in the non-aqueous portion of the composition would affect diffusion parameters and would ultimately affect release of the enzyme prematurely, and storage stability is a recognized parameter in the Lykke reference. Optimization of variable which effect

storage stability would only require routine skill in the art and the skilled artisan would have been motivated to arrive at "at least 70%" of the non-aqueous component of the compositions comprising water-soluble ionic salt.

Optimization of result effective variables only requires routine skill in the art. One of ordinary skill in the art would have been motivated to optimize these parameters to arrive at the optimal cleaning properties through controlled enzymatic release in the wash cycle to prevent enzyme degradation during storage as taught by Lykke.

7. Claims 17,18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lykke et al. (US 6,242,405) in view of Gutierrez et al. (US 5,739,093).

Lykke et al. are relied upon as described in paragraph 6.

Lykke et al. do not teach the addition of dyes or pigments and propylene glycol.

Gutierrez et al. teach detergents for laundering comprising propylene glycol as a conventional solvent combined with water and dyes as conventional coloring agents used in detergents (column 8, lines 1-5; column 45, lines 45-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the compositions of Lykke et al. by incorporating the propylene glycols and dyes taught by Gutierrez et al. because Gutierrez et al. teach the utility and conventionality of these ingredients in laundering compositions and Lykke et al. invite the inclusion of coloring agents and organic solvents.

***Response to Arguments***

8. Applicant's arguments filed regarding Lykke et al. have been fully considered but they are not persuasive. The applicant argues Lykke fails to teach polyacrylic acid in a gel and only teaches it as a core polymer. The examiner argues that Lykke teach detergent gels in which encapsulated enzymes are dispersed and which permeate the shell of the encapsulation (column 16, lines 15-50). Lykke further teach that the detergents comprise polyacrylate builders (column 24, lines 4-20). Accordingly, the rejections are maintained.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMINA KHAN whose telephone number is (571)272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/  
Primary Examiner, Art Unit 1796

/Amina Khan/  
Examiner, Art Unit 1796  
September 24, 2010



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